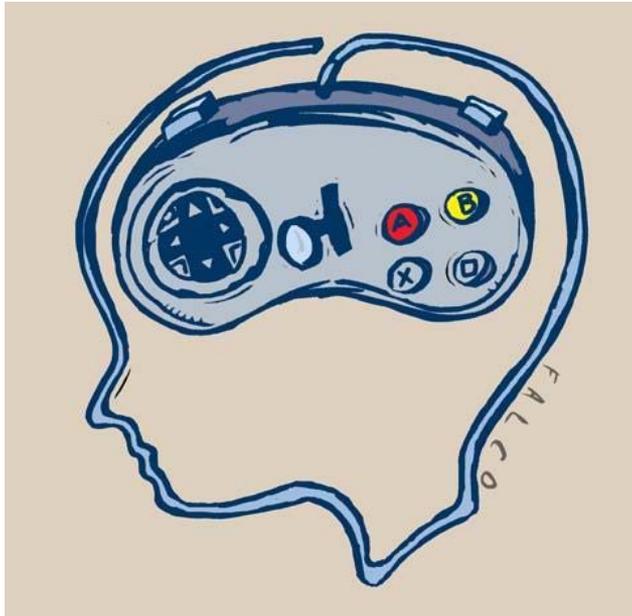


# Using Videogames for Leadership Learning

## Current Trends and Practices

Executive Summary  
prepared by Roland Deiser

October 2009



This report was prepared with the with the support of Ved Kachole, Rick Benzel, and Ben Sawyer

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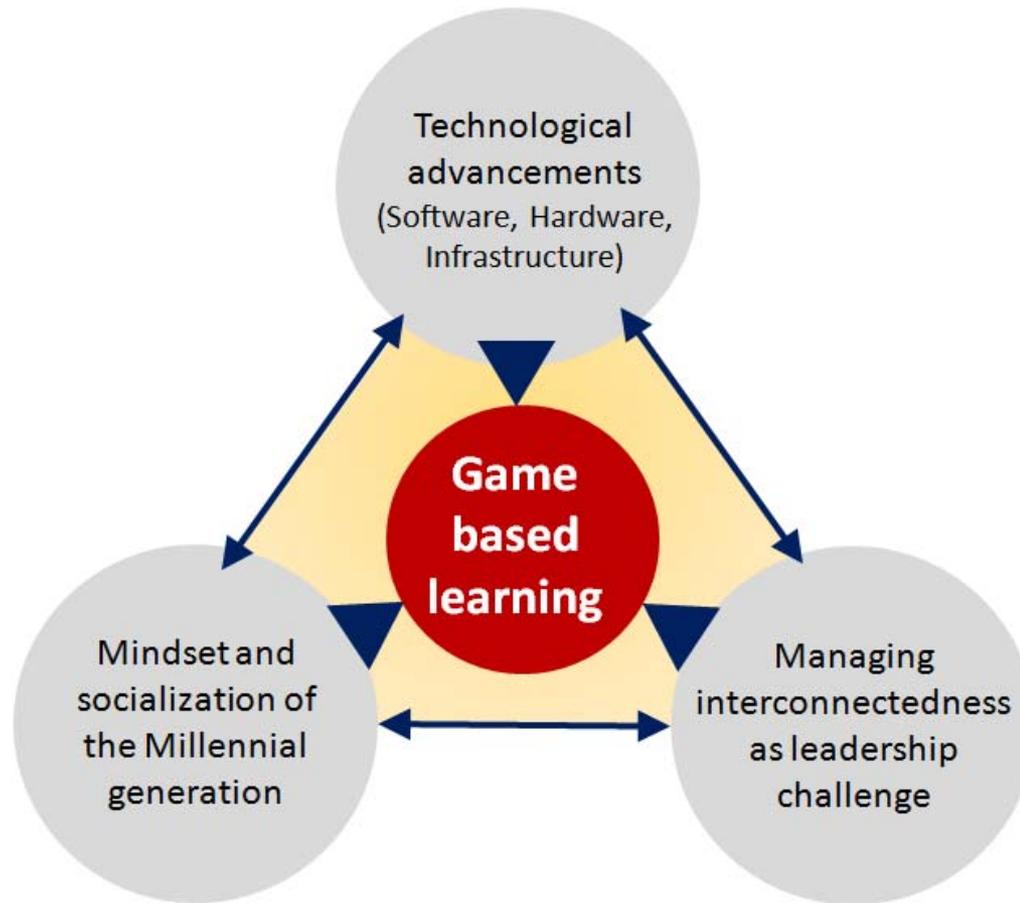
An **ECLF** report

# The 2008 ECLF Survey results suggests a growing interest in videogames as learning tool

## From 47 European CLOs...

- More than 50% said video games can accurately simulate a real business dilemma
- 89% agreed that video games can enhance leadership development.
- 89% said it is feasible to introduce games at their company.
- 60% intend to test video games within the next 3 years  
and
- 10 companies expressed interest in developing a customized game solution

# A “Perfect Storm” is Coalescing that Supports the Use Of Video Games in Corporate Learning.



# Some Requirements for Leadership in the 21<sup>st</sup> Century

- Leading and making decisions amidst uncertainty
- Leading without formal influence and power
- Entrepreneurial thinking and acting
- Collaboration and teamwork across multiple cultures
- Achieving performance in loosely coupled global networks
- Expeditionary business modeling
- Enhanced communication skills across all media
- Responsible Leadership / corporate citizenship



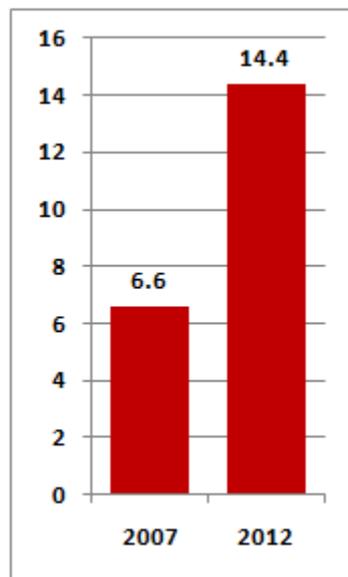
**Games can provide a unique contribution  
to foster these competences**

# A Brief History of Video Games

- 
- 1950s** Earliest rudimentary games
  - 1970s** Industry launched with Atari console for TV sets
  - 1980s** Early growth of hardware / software with Activision & many game developers + Nintendo's console
  - 1990s** Games become mainstream form of entertainment;  
Nintendo launches Game Boy.  
Sony launches PlayStation.  
Online games introduced
  - 2000** Microsoft launches Xbox. Realistic 3-D games abound.
  - 2006** Nintendo launches Wii and revolutionizes space
  - 2008** Game sales surpass music, movie box office, and DVD sales.

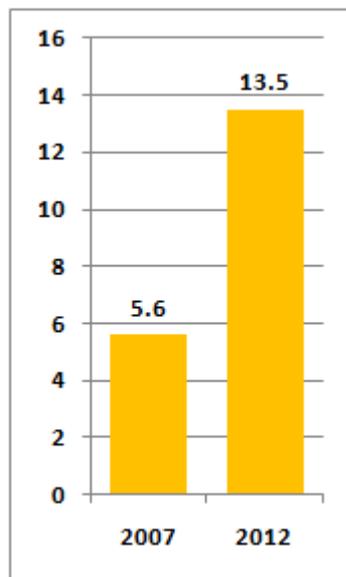
# Games: A Major Economic Force with Significant Growth Forecasts

### Online games



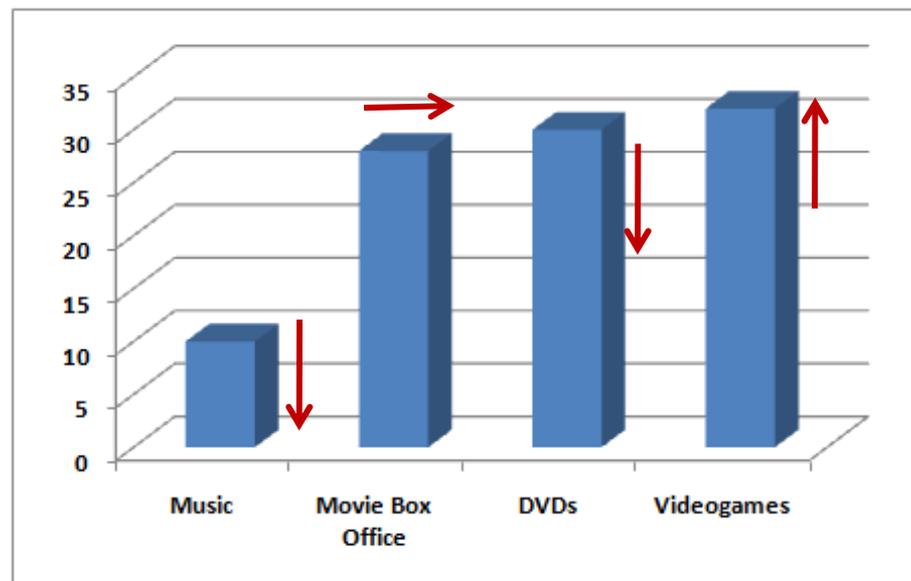
+ 120%

### Mobile games



+ 140%

### Games SW sales and peer media sales



# The World of Videogames has Become Colorful and Diverse

## Types of games

- Role Playing
- Real-Time Strategy
- Simulations
- Puzzle games
- Platform games
- First-person shooter

## Platforms

- PC game
- Console game
- Handheld game
- Arcade game
- Browser-based online game
- Server-based online game
- Mobile game

## Players

- Single Player Games
- Multiplayer Online Games (MOGs)
- Massive Multiplayer Online Games (MMOGs)

# The Emergence of 3D Virtual Worlds Adds a New Dimension to the “Playful Universe”

## Second Life



Largest online 3D virtual world community  
\$1bn economy  
16mn registered “residents”

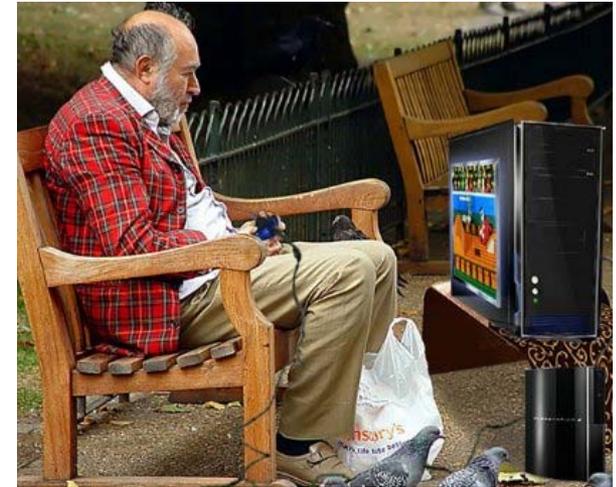
Forterra, Protosphere, etc.



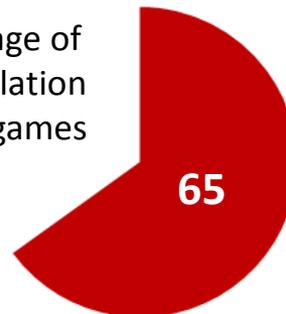
Private virtual worlds for corporate meetings, training, customers, etc.

# Games Have Become Mainstream Entertainment for All Ages

Percentage of American households that play computer or video games.	65
Average age of video game players	35
Average age of the most frequent game purchaser	40
Percentage of all game players that are female	40
Percentage of females aged 18 or older within the entire gamer population	33
Percentage of males aged 17 or younger within the entire gamer population	17
Percentage of population aged 50+ that plays video games.	26
Average number of years gamers have been playing video games	13



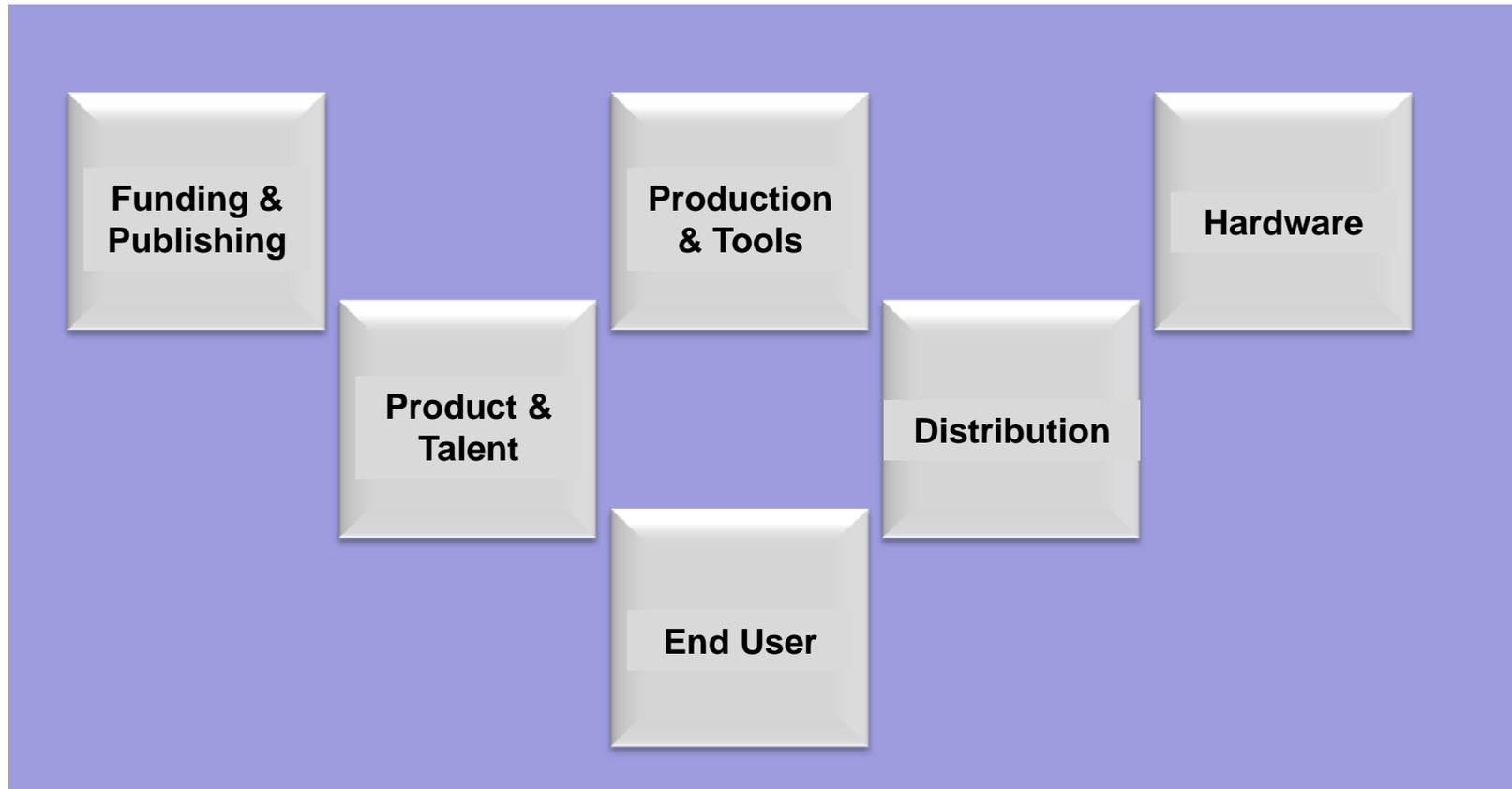
Percentage of US population playing games



Percentage of US women playing games



# The Value Chain of the Videogames Industry is Complex and has Multiple Layers



# Some of the Most Important Players (“Majors”)

	Hardware	Funding & Publishing	Product & Talent	Production & Tools	Distribution
 Wii, DS	●	●	●	●	
SONY Playstation	●	●	●	●	●
 X-Box	●	●	●	●	
		●	●	●	
		●	●	●	
		●	●	●	

# Characteristics of the Consumer Games Industry

- Serious \$\$\$ - multibillion dollar industry
  - ➔ Big bets, major investments, huge paybacks
- Oligopolistic
  - ➔ 20 companies make 90%+ of revenue
- Hit driven – importance of franchises
  - ➔ (case in point Grand Theft Auto)
- Majors: Vertical integration
- Independents: Single hits (lottery game)
- Key success factors
  - ➔ Franchise ownership (synergies w/ movie industry)
  - ➔ Quality of game (entertaining)
  - ➔ Marketing power
  - ➔ Distribution muscle



\$ 600 million in 1<sup>st</sup> week

# Serious Games – an Emerging Industry (1)

- Driven by academic insight that games are medium for learning and development
  - ➔ James Gee, Tony O'Driscoll, John Beck...
- Hope to escape boredom of WBT and harvest unique affordance
  - ➔ But many less creative solutions build on old paradigm (multiple choice tests / decision trees in 3D worlds by Avatars)
- Small \$\$ - Single Project driven (50K – 1mn)
  - ➔ Funding by government (Defense sector, health care)
  - ➔ Require customization for specific organizational / business context
  - ➔ Need to be embedded in overall L&D solutions
- Key success factors
  - ➔ Deep understanding of how to link learning and game architecture
  - ➔ Ability to compete with complex proposals
  - ➔ Ability to deal with corporate client dynamics (multi-layered sales process)
  - ➔ Ability to provide maintenance and support

# Serious Games – an Emerging Industry (2)

- Majors: No interest
  - ➔ Incompatible with their business model (B2C vs B2B)
  - ➔ Economically not attractive (trade-off with consumer hit opportunities)
- Most independents: Little to no interest
  - ➔ Lack of understanding of corporate market
  - ➔ Not rewarding enough for the risk
- What remains: Enthusiasts (Labor of Love)
  - ➔ Highly fragmented
  - ➔ Typically mom and pop shops with 2-10 employees
  - ➔ Venture funded / government funded
  - ➔ Many live from project to project
  - ➔ Esoteric community of the few who have successfully launched a serious game
- Cross-over with virtual world vendors, e-learning vendors, and consulting firms (e.g., IBM, Tata Interactive)

# Despite the Weaknesses of the Industry Structure - Games can Contribute a Lot to Corporate Learning

- Video games enhance the “constructivist” element in learning
  - ➔ Players create realities through interaction that “get back” to them
  - ➔ Games help people learn to control processes and see how they perform in their self-created environment
- Games can model systems and build systemic thinking.
- Certain games expose players to dealing with uncertainty and surprises
- Multiplayer games enhance various types of social interactions.
- Alternate worlds allow for safe experimentation without dire consequences when they make mistakes
- Games foster role flexibility by letting the player chose and experiment with different identities
- Games foster meta=learning (reflection on rules)

# Virtual Worlds Offer Many Tangible Advantages – and They are a Bridge to Immersive Games

- **Discovery learning –**  
in a 3D world, users can click on objects in that world and see their internal parts to learn about the associated information
- **Reinforcement learning –**  
in a 3D world that offers a repository of job aids, tools, etc., learners can learn about the associated objects
- **Collaborative workspaces –**  
a 3D world can contain breakout rooms and informal sites for discussion, encouraging graduate school-style case study and research
- **Distance delivery –**  
a 3D world can take the place of a traditional instructor-led learning
- **Simulated learning –**  
a 3D world can model a process or interaction that closely resembles the real world in terms of fidelity and outcomes.
- **Cost Savings**  
Virtual meetings and collaboration saves travel costs

# We Talked to 13 Major Corporations to Understand Their Perspective on The Subject

company	Title
<b>Best Buy</b>	Learning Technology Team
<b>BP</b>	BP Information Technology & Services - Chief Technology Office
<b>Cisco</b>	Global Head of Learning
<b>Disney</b>	Director of Leadership Learning, Disney University
<b>Electronic Arts</b>	VP Organizational Effectiveness
<b>GE</b>	Head of Leadership Development, EMEA
<b>Hewlett Packard</b>	Chief Learning Officer
<b>Hilton Garden Inns</b>	Director, Brand Culture & Communication
<b>IBM</b>	Head of Virtual Learning Strategy, IBM Center for Advanced Learning
<b>Intel</b>	Head World-wide Management Development Strategy and Programs
<b>Microsoft</b>	General Manager, Leadership Development & Recruiting
<b>SAP</b>	Manager, Application of New Learning Techniques Knowledge Production Services
<b>Sodexo</b>	Director, Sodexo Management Institute

# We Also Talked to 19 Serious Game Developers and the Research Center that Develops Army Games

Area/Code
Brand Games
Caspian Learning
Forterra Systems
The g2g3 Group Ltd.
Ideonic
NexLearn, Inc.
Paladin Studios
PIXELearning
Ranj Games

Sealund & Associates
Serious Games Interactive
SimuLearn, Inc.
Tata Interactive Systems
TeamingStream
TPLD
Virtual Heroes
VSTEP
Will Interactive
+ USC's Institute for Creative Technology

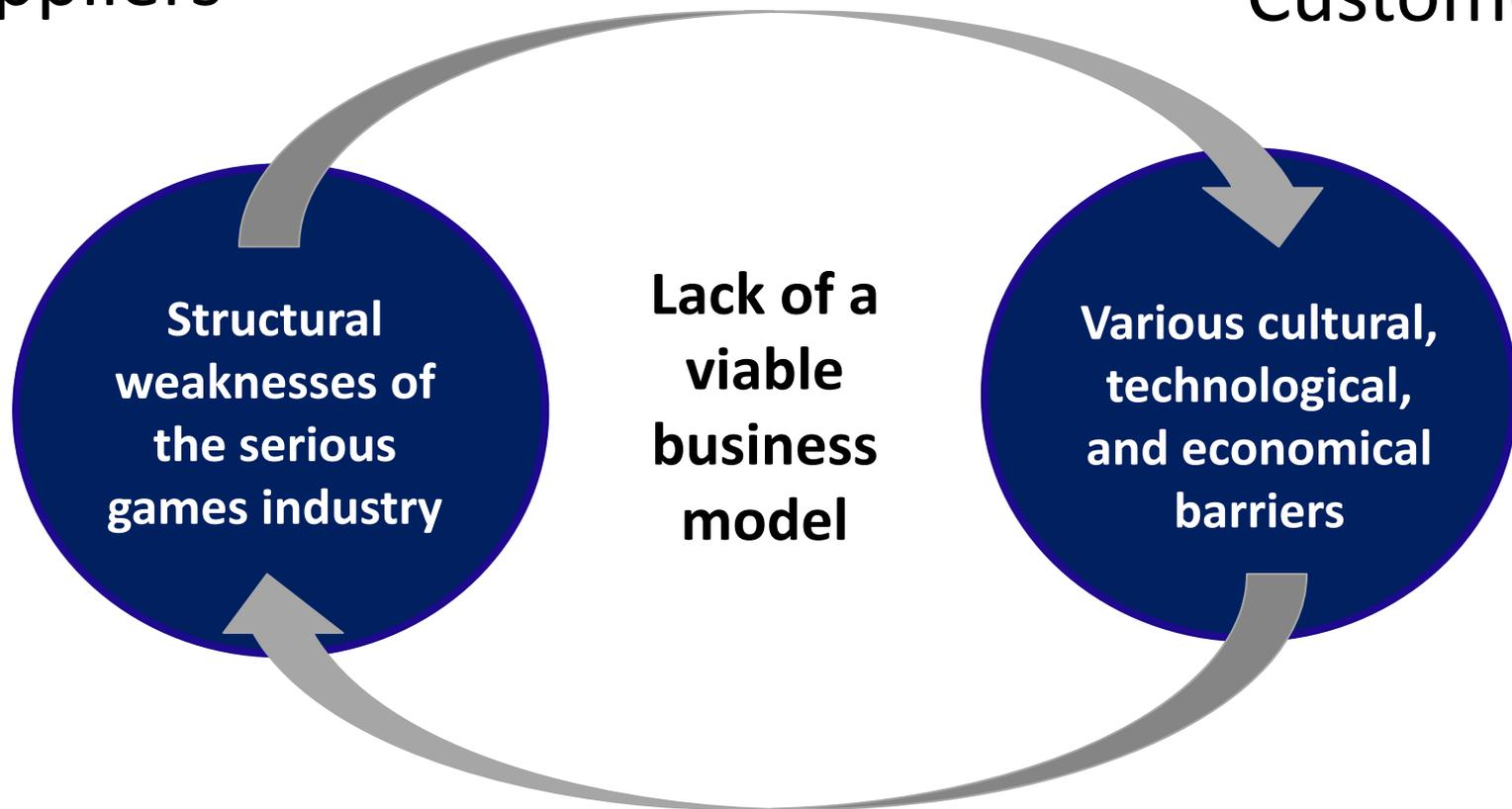
# Most Companies Sit on the Fence, Some Test the Waters with Low-level Games and Virtual Worlds

- If companies use games at all, then primarily for
  - ➔ functional training (service, sales, finance, project management), or
  - ➔ for on-boarding (explore company virtually)
- Virtual worlds are increasingly used - for meetings and collaboration
  - ➔ Many have left Second Life because of security issues, but the concept is alive and well (e.g. Forterra, Protosphere)
- IT infrastructure and policies are an issue
- There are no famous examples yet - many take a wait and see attitude
- Games are generally perceived as expensive and lacking a clear ROI
  - ➔ It takes guts for a CLO to go for a game based solution
- Work and play is seen as incompatible in many corporate cultures
- If used, games need to be integrated in a larger learning solution
  - ➔ Few of any companies create an adequate context that sustains game utilization

# Breaking The Mold Requires a Creative Approach That Transcends the Current Conundrum

Suppliers

Customers

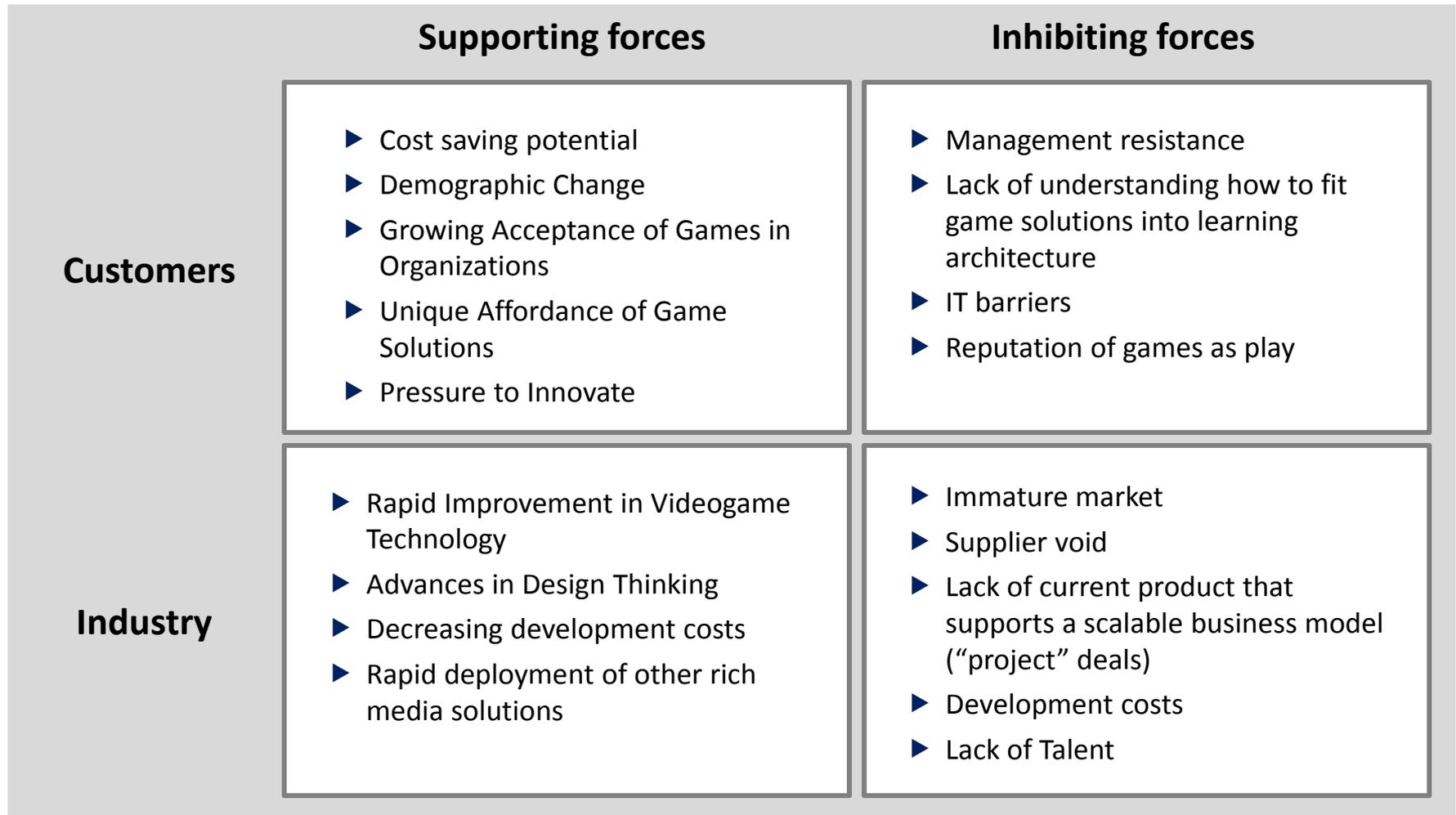


# U.S. Military Video Games – A Pioneering Role

- Military is pushing the envelope when it comes to the use of games
  - ➔ 1997 \$45mn to create Institute for Creative Technologies @ USC (ICT)
- Cutting edge technology – too advanced for corporate use
  - ➔ BUT note: Technology does not equal creativity in game design
- It is worth monitoring developments and capitalize on some of the research
  - ➔ Unique access through ECLF partnership with NDU and RD Senior Fellow at USC



# Forces Influencing the Adoption of Videogames for Corporate Learning



# Options for Creating a Leadership Video Game Under ECLF Banner

- Use an existing game solution and customize it/leverage it
- Use rich media solutions (web 2.0, simulations) and develop them into something more game-like
- Develop a new game from scratch that fits our specifications for a valid leadership game
- Create an incubator for game solutions that break the mold of the current model

# Contact



Roland Deiser  
Executive Chairman  
European Corporate Learning Forum

[roland.deiser@eclf.org](mailto:roland.deiser@eclf.org)  
[www.eclf.org](http://www.eclf.org)